

Product datasheet for RC213444

Gemin 8 (GEMIN8) (NM 017856) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Gemin 8 (GEMIN8) (NM_017856) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: Gemin 8
Synonyms: FAM51A1
Mammalian Cell Neomycin

Selection:

Neomychi

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC213444 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC213444 protein sequence

Red=Cloning site Green=Tags(s)

MAAVKASTSKATRPWYSHPVYARYWQHYHQAMAWMQSHHNAYRKAVESCFNLPWYLPSALLPQSSYDNEA AYPQSFYDHHVAWQDYPCSSSHFRRSGQHPRYSSRIQASTKEDQALSKEEEMETESDAEVECDLSNMEIT EELRQYFAETERHREERRRQQQLDAERLDSYVNADHDLYCNTRRSVEAPTERPGERRQAEMKRLYGDSAA KIQAMEAAVQLSFDKHCDRKQPKYWPVIPLKF

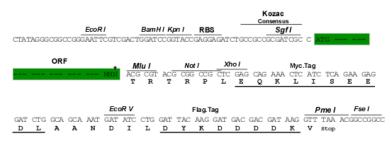
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6385 c08.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_017856

ORF Size: 726 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).



Reconstitution Method:

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: <u>NM 017856.3</u>

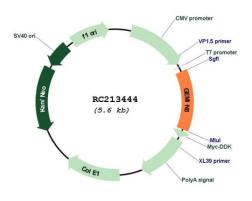
RefSeq Size: 3259 bp
RefSeq ORF: 729 bp
Locus ID: 54960
UniProt ID: Q9NWZ8
Cytogenetics: Xp22.2
MW: 28.6 kDa

Gene Summary: The protein encoded by this gene is part of the SMN complex, which is necessary for

spliceosomal snRNP assembly in the cytoplasm and pre-mRNA splicing in the nucleus. The encoded protein binds to both SMN1 and the GEMIN6/GEMIN7 heterodimer, mediating their interaction. This protein is found in nuclear Gemini of Cajal bodies (gems) and in the cytoplasm. Three transcript variants encoding the same protein have been found for this

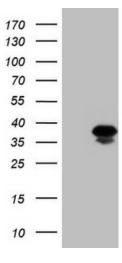
gene. [provided by RefSeq, May 2010]

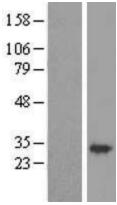
Product images:

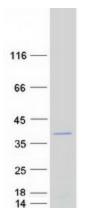


Circular map for RC213444









HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GEMIN8 (Cat# RC213444, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GEMIN8 (Cat# [TA805836])(1:2000). Positive lysates [LY413420] (100ug) and [LC413420] (20ug) can be purchased separately from OriGene.

Western blot validation of overexpression lysate (Cat# [LY413420]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213444 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified GEMIN8 protein (Cat# [TP313444]). The protein was produced from HEK293T cells transfected with GEMIN8 cDNA clone (Cat# RC213444) using MegaTran 2.0 (Cat# [TT210002]).